

## Effect of drying time and evaporated moisture on the dielectric behavior of ginger at 0.2 to 20 GHz.

### ABSTRACT

Dielectric properties of ginger (*Zingerber officinale* Ross) were measured at 0.2 to 20 GHz and at temperature 26°C, using the HP-85070B open-ended coaxial line probe (OECF) coupled with a computer controlled software automated network analyzer (ANA). The dielectric constant for all samples was found to decrease with frequency. However, the dielectric loss factor decreased initially and started to increase at 2.45 GHz until 20 GHz following the trend of the dielectric properties of deionized water. The penetration depth was affected by evaporated moisture at the lower frequency region.

**Keyword:** Ginger; Lower frequency; Dielectric properties.